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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------------------------|--------------------|----------------------|---------------------|-------------------------|--|
| 09/854,528 | 05/15/2001 | Toru Suzuki | 00653/01-F-011US/UA | 8224 | |
| 513 | 7590 03/29/2004 | • | EXAMINER | | |
| WENDEROTH, LIND & PONACK, L.L.P. | | | FIORILLA, CH | FIORILLA, CHRISTOPHER A | |
| 2033 K STR SUITE 800 | EET N. W. | | ART UNIT | PAPER NUMBER | |
| WASHING | TON, DC 20006-1021 | | 1731 | | |

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---|--|---------|
| | Application No. | Applicant(s) | , |
| | 09/854,528 | SUZUKI ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | Christopher A. Fiorilla | 1731 | |
| The MAILING DATE of this communication ap Period for Reply | opears on the cover sheet with | the correspondence address | |
| A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | . 136(a). In no event, however, may a rep ply within the statutory minimum of thirty d will apply and will expire SIX (6) MONTI tte, cause the application to become ABA | ly be timely filed (30) days will be considered timely. HS from the mailing date of this communic NDONED (35 U.S.C. § 133). | cation. |
| Status | | | |
| 1) Responsive to communication(s) filed on 19 2a) This action is FINAL. 2b) Th 3) Since this application is in condition for allow closed in accordance with the practice under | is action is non-final. ance except for formal matte | | ts is |
| Disposition of Claims | | | |
| 4) ☐ Claim(s) 1-11 is/are pending in the application 4a) Of the above claim(s) 4-11 is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and a | wn from consideration. | | |
| Application Papers | | | |
| 9) The specification is objected to by the Examination 10) The drawing(s) filed on is/are: a) and according a control of the specific and a control | ccepted or b) objected to be drawing(s) be held in abeyand oction is required if the drawing(s) | e. See 37 CFR 1.85(a).) is objected to. See 37 CFR 1.1 | |
| Priority under 35 U.S.C. § 119 | | | |
| a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document of the copies of the priority document of the copies of the priority document of the copies of the certified copies of the priority document of the copies of the certified copies of the priority document of the copies of the copies of the priority document of the copies of the priority document of the copies of the c | nts have been received. nts have been received in Ap iority documents have been r au (PCT Rule 17.2(a)). | plication No eceived in this National Stage | e |
| | | | |
| Attachment(s) 1) X Notice of References Cited (PTO-892) | 4) 🔲 Interview Su | mmary (PTO-413) | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date | Paper No(s) | /Mail Date ormal Patent Application (PTO-152) | |

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1. Claims 4-11 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made without traverse in Paper No. 7.

- 2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giessen et al. (5,114,905) in view of Boutaghou et al. (2003/0137777).

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Giessen et al. discloses a method of manufacturing an oriented sintered ceramic product.

The method of Giessen et al. includes the steps of: dispersing a powder into a solvent (e.g. col. 4, line 44) to prepare a slurry; solidifying (e.g. claim 5) to mold the slurry in a magnetic field (e.g. col. 5, lines 10-15); and then sintering (e.g. claim 10) the molded slurry.

Giessen et al. also discloses that the process is suitable for use with e.g. piezoelectric materials (e.g. col. 3, line 7).

Boutaghou et al. discloses that zinc oxide and aluminum nitride are piezoelectric materials (see e.g. paragraph [0025]). It would have been obvious to one skilled in the art at the time of the invention to use these materials in the process of Giessen et al. in view of the generic teaching therein.

- 6. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.
- 7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Fiorilla whose telephone number is (571) 272-1187. The examiner can normally be reached on M-F, 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher A. Fiorilla Primary Examiner Art Unit 1731

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